ABSTRACT OF THE DISCLOSURE

It is intended to provide a method of efficiently inducing the growth of nerve stem cells, which are most important in transplantation therapy for nerve damage and neurological dysfunction, either *in vitro* or *in vivo*, a method of using the nerve stem cells obtained by the above growth induction method, etc. A mammalian nerve tissue containing nerve stem cells is separated and the nerve stem cells are selectively cultured in a medium containing growth factors such as EGF and FGF. Next, the nerve stem cells are co-cultured with dendritic cell such as an immature dendritic cell subset having a CD11c surface marker on the cell surface, spleen cells or blood cell-type cells such as CD8-positive T cells. Alternatively, the nerve stem cells after the culture are further cultured in the presence of GM-CSF or the nerve stem cells after the culture are further cultured in a culture supernatant of dendritic cells or a culture supernatant of blood cell-type cells.